


determine the number of channels it seeks to be available at any one time for simultaneous intercepts. This number would be smaller than the number of intercept subject on the telephone intercept lists since not all intercept subjects will be using the Gateway at the same time. This number should also reflect the increased number of channels used to intercept multiparty calls.

28. SatCom and INA will need at least two years to implement any additional intercept capabilities, as may be required by judicial interpretation of CALEA's basic provisions flowing from the Commission's legal findings in the anticipated rulemaking on terrestrial telephone systems.

29. Notwithstanding the foregoing, SatCom has made available on a reasonably timely basis and at a reasonable charge to INA and Iridium LLC such features or modifications as are necessary to comply with the assistance capability and capacity requirements of CALEA.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information and belief.

Executed June 30th, 1998.



Pramod Patel

B

Summary Analysis of the Iridium System's Intercept Capability Features

The following is an outline of the features provided in the Iridium CALEA approach, as well as an explanation of whether the features set forth in the terrestrial telephony industry standard J-STD-025, and the FBI's ballot comments to the proposed standard, are applicable to and supported in the Iridium system.

I. Introduction to the Iridium System CALEA Approach

The Iridium system includes the following features:

- Call content is delivered over dial up connections
- One call content channel is delivered for interception of voice, two for interception of data or fax.
- Interception is based on the MSISDN of the target subscriber.
- Call related data, or Intercept Records, are delivered over an X.25 interface using FTAM as a file transfer mechanism. Records are encoded with the basic encoding rules as used with ASN.1.
- A call content channel is delivered for each call set up to a target subscriber. If a target party sets up a multiparty call to two other parties, two call content channels will be delivered to the law enforcement agency.

II. Intercept Capabilities in the Iridium System

A. Stage One User Perspective

1. The delivery function within the Gateway is capable of delivering intercepted communications to up to 4,500 collection function delivery numbers.
2. All bearer services are intercepted in the Iridium system.
3. Call content is delivered over dial up connections (rather than nailed up circuits as described in the terrestrial telephony standard). One call content channel is delivered for interception of voice, two for interception of data or fax.

4. Call related data are delivered over an X.25 interface using FTAM as a file transfer mechanism (rather than through the use of LEASP as described in the terrestrial telephony standard). Records are encoded with the basic encoding rules as used with ASN.1.
5. The first 4 digits of the intercepted subscriber's MSISDN are unique to Iridium. Identification is inherent in the Iridium numbering plan (no need for serving system message described in terrestrial telephony standard).
6. Separate circuits are used to deliver call content and call related data.
7. Up to five collection points can be serviced simultaneously for a single interception.
8. Call content is not lost if call related data cannot be delivered.
9. Call related data is not lost if call content cannot be delivered, except for call duration in the end records.
10. Packet data is not provided in the Iridium system. The terrestrial telephony standard requirements relating to packet data do not apply in Iridium.

B. Stage Two Network Perspective

1. ISUP used to deliver call content.
2. Answer records provided (introduced in SR7).
3. Origination message supported.
4. Failed call attempt message supported (introduced in SR7).
5. Redirection message supported.
6. Release message supported.
7. Begin intercept record message provided (CCOpen message described in the terrestrial telephony standard is not provided because dedicated resources are not envisioned in Iridium).
8. End of intercept record message provided (rather than CCClose message described in the terrestrial telephony standard).
9. Supplementary service indication provided (similar to Change message described in the terrestrial telephony standard).

C. Stage Three Implementation Perspective

1. Call Identity employed (introduced in SR7).
2. Location Area Code used to provide location of subscriber.
3. CCIIdentity message is not used because Iridium does not use dedicated circuits.
4. Speech and 3.1 kHz audio bearer services intercepted and delivered over circuit-mode digital facilities, will use the MU-law encoding of ITU-T Recommendation G7.11, Pulse code modulation (PCM) of voice frequencies.
5. HLR intercept not employed in Iridium.

D. "Punch List" Features

1. IAP Location and Party Identity Context: Directory numbers of calling and called parties are available in Iridium.
2. Capability Protecting Single Associate on Hold: If separate call identities and CCCs are maintained for individual call legs of a subject-initiated multiparty call, then the party's call content shall be delivered over the CCC only when the intercept subject or another party of the multiparty call is capable of receiving such call content.
3. Correlation Tag: The target ID is placed in the ISUP signaling (in SR7, a unique call ID will be placed both in the ISUP signaling and the call related data).
4. Timing: Call related data is presented at the GW interface within 1 second. Time stamps will be accurate to less than 1 second.
5. Conference on Hold: The Second CCC is provided whenever the subject service continues to support the associates. A conversation on hold is monitored. Iridium provides stublines for each party of a call.
6. Separate Conference Talk Paths: Withdrawn by law agencies. A single CCC is delivered for each party connected to the target during a multiparty call if the target is the anchor of the call.
7. Connection Change/ Party Hold, Party Join, Party Drop/: The CCC created is maintained until the user releases (even when the target places the other party on hold). Connection messages are provided through a combination of begin, supplementary service and end record messages.

8. Origination Triggers: Voice activated dialing is not offered in Iridium.
9. In-band digits: Post cut-through digits on CCC are available for Title III intercepts.
10. Notifications: SMS and subscriber controlled input are intercepted in the form of an intercept record message. Continue records provide supplementary service information.
11. Feature Status: Subscriber controlled input which changes feature profiles is provided over the CDC.
12. Surveillance Status: This feature is not provided in the Iridium system.
13. Continuity Verification: This feature does not apply in the Iridium system because the system does not include dedicated circuits.
14. CDC Delivery Interface: X.25 used to transport interception records.
15. CCC Interface: Call content delivered over ISUP.

CERTIFICATE OF SERVICE

I, Thomas M. Barba, an attorney in the law firm of Steptoe & Johnson LLP, hereby certify that I have on June 30, 1998 caused to be served by first class mail, postage prepaid, or by hand delivery (indicated with an *), a copy of the foregoing Petition to the following:

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